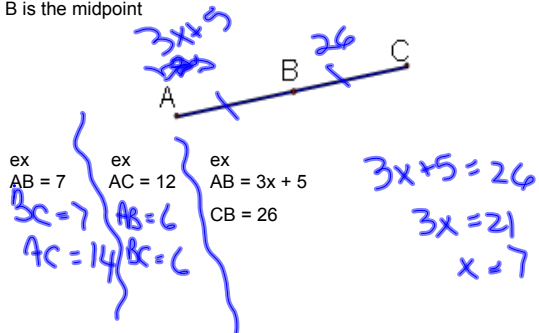


Quiz 2.1-2.4 Tomorrow!

2.1 Segment Bisects

B is the midpoint



Find the midpoint.

C(-3, 8)

D(-7, 5)

$$M\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$$

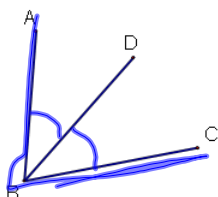
$$M\left(\frac{-3 + -7}{2}, \frac{8 + 5}{2}\right)$$

$$M(-5, 6.5)$$

2.2 Angle Bisectors

 \overrightarrow{BD} bisects $\angle ABC$

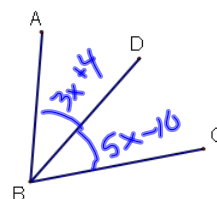
$$\angle ABD \cong \angle DBC$$



EX
 $m\angle ABD = 20$
 $m\angle ABC = 40$

EX
 $m\angle ABC = 84$
 $m\angle DBC = 42$

2.2 Angle Bisectors

 \overrightarrow{BD} bisects $\angle ABC$ 

EX
 $m\angle ABD = 3x + 4$
 $x =$

$m\angle DBC = 5x - 10$

$$3x + 4 = 5x - 10$$

$$4 = 2x - 10$$

$$14 = 2x$$

$$7 = x$$

2.3 Complementary and Supplementary

90

180

$$m\angle MNO = 50$$

$$m\angle MNO = 47$$

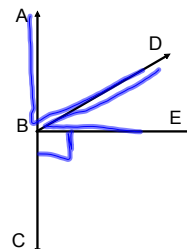
Complement? 40

Complement? 43

Supplement? 130

Supplement? 137

Are the angles complementary, supplementary, or neither?

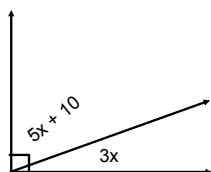


$\angle ABD$ & $\angle DBC$

$\angle ABC$ & $\angle CBE$

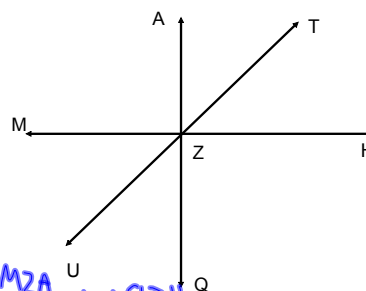
$\angle ABD$ & $\angle DBE$

S
N
C



$$5x + 10 + 3x = 90$$

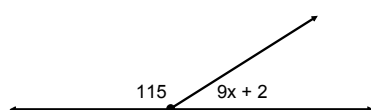
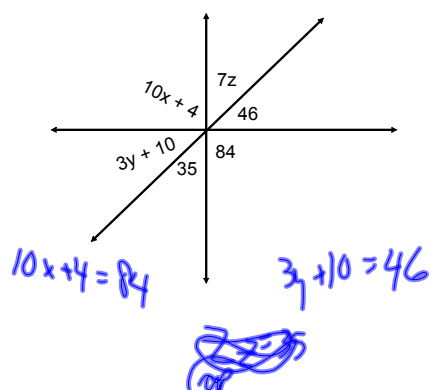
2.4 Vertical Angles and Linear Pair



$\angle MZA + \angle QZT$
 $\angle AZT + \angle UZQ$

$\angle UZM$ $\angle TZA$

2.4 Vertical Angles and Linear Pair



$$9x + 2 + 115 = 180$$

$$9x + 117 = 180$$

$$9x = 63$$

$$x = 7$$